

*Twenty years ago, Chris Argyris was advising companies how to improve the ability of their managers and employees to learn. He is still challenging academics and executives to lay aside defensiveness, engage in honest inquiry, and seek actionable knowledge.*

## ***A Conversation with Chris Argyris: The Father of Organizational Learning***

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Chris Argyris is James B. Conant Professor Emeritus and holds positions in both the Harvard University School of Business and School of Education. His books on organization development and organization learning have become classics in the field.

Argyris has received eight honorary degrees from universities in the USA and abroad. He spent 20 years at Yale University where a Chair in Social Psychology of Organization and Intervention is named after him. He was the 1997 recipient of the Kurt Lewin Award.

Publications by Argyris include a book reviewing much of his work entitled *On Organizational Learning* (Blackwell Publishers, Inc.), published in 1994, and *Organizational Learning II* with Donald Schon, 1996 (Addison Wesley). His most recent book is titled *Knowledge for Action: A Guide to Overcoming Barriers to Organizational Change*, published by Jossey-Bass.

This interview was conducted by Robert M. Fulmer, W. Brooks George Professor at William and Mary, and J. Bernard Keys, Callaway Professor of Business, Center for Managerial Learning, Georgia Southern University.

**F/K:** Of all of the contributions you have made to the management discipline, which do you reflect on with greatest satisfaction?

**ARGYRIS:** As I look back on my academic research, I think it's fair to say that my first funda-

mental interest has been the notion of justice and then, after that, the notion of truth. I put it that way because I know good research that has been done under dictators who were unjust. My feeling is that scholars ought to work first on justice because, if you have that, you can have free research. If you have that in an organization, there can also be free inquiry. So justice, truth, competence, effectiveness, learning—these are my keys.

What gives me the greatest satisfaction is what I call the “theory of action perspective” that I developed with Donald Schon. And I’m able to connect my research with the latest findings on the way the human mind/brain works. Now the reason I think that is important is, first, individuals are the key when they are acting in order to learn, or when they are acting to produce a result. Second, it’s not possible to act without using your mind/brain. Three, if this is so, then all of our knowledge somehow has to be generalized and crafted in ways in which the mind and brain can use it in order to make it actionable. Unfortunately too many social scientists don’t worry about that criteria. They’re from the mental notion that if we can describe the world as accurately or as honestly as we can, then we can predict, and that’s enough. But they don’t ask about the applications that can be made, or how these can be implemented enough or used by the human mind. To me, the ability to increase learning, to change behavior, or to improve performance is essential.

**F/K:** One of the major complaints about business academia today is the issue of “relevance.” Your work is unique in that it has had major impact on a variety of academic disciplines, but also is widely used in the business community. How do you compare the impact of your work in the business and academic worlds?

**ARGYRIS:** I’m interested in producing knowledge that is actionable. In order to be actionable, it must be actionable by practitioners. I think practitioners have found my work useful because of my interest in actionability. In the last 10 to 15 years, I have especially focused on the defensive routines of organizations that prevent actionability. And what I get from executives is a continual awareness of how important it is to overcome these defensive routines, especially if you’re interested in changing organizations.

There is no course that I’m aware of that teaches how to be good at creating defensive routines in order to avoid discomfort or to maintain the status quo, but everyone manages to learn them. The point is, too often these defensive routines have been bypassed or ignored. Now, if you go to the academic community, I think my impact has been as a person trying to describe what he sees as accurately as he can. And there is, if I can judge from the citations, a lot of interest in things like the defensive routines, the research that Don and I did on organizational learning, and so on. There is another part of my work which is just beginning to gain overt acceptance, and that is my claim that most good social science research is not actionable. (By good, I mean it follows the rules of rigorous methodology.) Calling attention to this has irritated colleagues of mine, but I think they’re beginning to see there’s some validity to this, and my younger colleagues do see this concern as valid.

When I received the 1997 Kurt Lewin Award, the audience, especially the younger people, seemed really quite interested in this tension, but felt helpless. They don’t have the skills to deal with the issue. They’re not taught these skills. So even if those little bits of data are valid, there’s an increasing number who say, “Yes, these concepts are important, let’s keep them in mind.” So I think that recognizing the importance of actionability has been appreciated by the business community and is beginning to have an impact on the academic world.

**F/K:** It's seems a little like the member of the British Parliament who said of Darwin's theory," It may be true, but if it's true, it's a damnable truth and it shouldn't be admitted."

**ARGYRIS:** Yes. I wrote an article in 1968 in the *Psychological Bulletin*, and I got letters back from the reviewers, which inadvertently included a note to the editor that was not intended for me to see. The reviewer said, "You should not consider him as a traitor or as an enemy in social psychology. He raises important questions." The other reviewer said, "He is a traitor!"

Apparently the editor decided to publish anyway, but that gives you an idea of the initial reaction.

**F/K:** Since your retirement in 1995, your work has grown in a couple of ways. First, you've been incredibly productive, but there's also a wider recognition and respect for your work. Is this just the new generation or does something else account for this growing appreciation and recognition?

**ARGYRIS:** I'm really not sure, but here are some possibilities. One is that by luck or whatever, I've been studying issues that are controversial and it takes awhile for those who think they are worth supporting to be able to support them. I just suggested that the notion of rigorous methodology being consistent with Model 1 is not something that was easily accepted by most social scientists. But people like Donald Campbell [the father of quasi-experimental methodology—ed.], in a public dialogue we had, said, "No, we have to listen to this." And then he said the problem would be that none of us is educated on how to overcome this and "maybe quite a few of us aren't motivated." So I think people are beginning to see that you cannot deny the validity of things like defensive routines.

**F/K:** Perhaps people haven't denied the impact, but failed to recognize how pervasive it is. It's easy to think about defensive routines in the abstract or to agree that they exist with other people, but the degree to which we are all hemmed in is really astounding.

**ARGYRIS:** Yes, but in my experience, managers see the pervasiveness immediately and say, "You mean you can do something about this? Where? How?" And I think the work that Don and I did was increasingly seen as a way of really beginning to do something. However, their problem became "Does it have to be this difficult?"

It's as difficult to learn as it is to learn a poor game of tennis. The concepts aren't that complicated, but practice is what's needed. So I think increasingly we're finding business executives who realize that it is going to be difficult, but that it has to be done. Now the fundamental message of Model 1 organizations is that truth is a good idea when it isn't threatening. If it's threatening, massage it, hide it, distort it, but don't deal with it. Information science technology has become increasingly sophisticated and it's making things transparent that years ago could be hidden. And transparency requires a reduction of defensive routines. Years ago I remember somebody saying, "Boy, you're right Chris, but there's nothing you can do about it." But today they're beginning to see there is something you can do about it.

One of the failures, I believe, in the organizational development movement is that in order to do something about this problem, we've got to find ways of integrating the functional disciplines such as finance, accounting or operations with the OB stuff.

**F/K:** Your work has been cited in so many different disciplines. My question may be naive, but was this a planned strategy in your early career development or was this a pleasant surprise that your work has been so widely received?

**ARGYRIS:** It wasn't planned in the sense of "I've got to be relevant to the various disciplines." I put it the other way. It goes back to the notions of justice and actionability. I was very much interested wherever actionability occurred, be it public or private organizations. I believe that the attraction to other disciplines was partly due to my studying governmental as well as private organizations. More importantly, I was interested in seeing how we could do research that helps managers.

My interest in justice and actionability was driven by seeking an answer to the question, "What the hell is really going on?" So I went from social psychology to sociology to anthropology to public administration. In fact the chair that I've held until recently allowed me to teach at the Harvard Business School, in the School of Education, at the Kennedy School of Government and in the law school. And I was getting ready to see if they might consider me at the Divinity School.

**F/K:** Where did this come from, Chris? Was this a cultural thing or was it part of your academic training to develop this commitment to actionability?

**ARGYRIS:** Oh, no, it wasn't part of my academic training. I remember there were four or five of us, I'm told, who were funded by the National Institute for Mental Health, in a sort of preferred basis because someone had identified us as doing the "outlier things that might well be important." There was a committee that met once a year to review our grants. When I wrote a book entitled *Interpersonal Competence and Organizational Effectiveness*, in which I became much more normative, the panel had trouble. They said he's gone too far. This is not something that NIH traditionally funded. Fortunately, the NIH administrators disagreed. They said that that's exactly what we want. The panel gave me another two years or so of funding.

The only support in my training came from Bill Whyte [William F.] at Cornell, Roger Barker, and Kurt Lewin. I remember Bill Whyte putting us in a station wagon and saying "go and get data." With Roger Barker, we were studying a town in Kansas. Kurt Lewin, whom I met just before he died, was always interested in taking a look at what was really going on. What impressed me is that we weren't going to help the world out there unless we could get to actionable knowledge. It took me a while to realize that not only was it a good idea to help practitioners, but the toughest test of rigorous methodology is not to see if you can predict, but if you can create what you're talking about. So I like to ask, "How do you know when you know something?" My answer is when you can create what you say you know.

**F/K:** When I review your work, the ideas that I think of first, maybe because I studied them first, are the concepts of single and double loop learning. I suspect people would mention those more than any of your other contributions. Would you mind repeating these basic concepts for our readers?

**ARGYRIS:** Our fundamental notion is that human beings have theories of action in their heads as to how to behave. There are two kinds: One is the one they espouse, and the other the one they actually use. The "theory in use" we found is the same all over the world. We couldn't believe this—for two years, we couldn't believe that something we called Model I wouldn't be different in any culture, between men and women,

## ***Model One Theory-in-Use***

### **Governing Values Held by Users**

1. Be in unilateral control of situations.
2. Strive to win and not to lose.
3. Suppress negative feelings in self and others.
4. Be as rational as possible.

### **Action Strategies**

1. Advocate your position.
2. Evaluate the thoughts and actions of others (and your own thoughts and actions).
3. Attribute causes for whatever you are trying to understand.

### **Learning Outcomes**

1. Limited or inhibited.
2. Consequences that encourage misunderstanding.
3. Self-fueling error processes.
4. Single-loop learning.

## ***Model Two Theory-in-Use***

### **Governing Values Held by Users**

1. Utilize valid information.
2. Promote free and informed choice.
3. Assume personal responsibility to monitor one's effectiveness.

### **Action Strategies**

1. Design situations or environments where participants can be original and can experience high personal causation (psychological success, confirmation, essentiality).
2. Protection of self is a joint enterprise and oriented toward growth (speak in directly observable categories, seek to reduce blindness about own inconsistency and incongruity).
3. Protection of others is promoted bilaterally.

### **Outcomes**

1. Learning is facilitated.
2. Persistent reduction of defensive organizational routines is facilitated.
3. Double-loop learning is generated.

In Model II learning, double-loop learning, you detect and correct an error by first examining the underlying values. In Model I you just say, "Oh, something's wrong. Well I'll change my words or I'll change the subject."

blacks and whites, young and old, poor and wealthy, well-educated and so on. We thought that if you had no variance, you were doing lousy research or you had a terrible theory or both. We began to realize that there is one way to better understand it, which is that the theory in use is like a master program that doesn't vary. But the behavior that people use to implement it may vary. So bypassing defensiveness in Britain is called being civilized, in Japan it may be called "saving face." And their words about being civilized or diplomatic may vary, but the theory in use is always the same. "If you sense an embarrassment or threat, bypass the embarrassment or threat and act as if you're not bypassing." That rule holds across all cultures, but the way they implement it doesn't. This master design is called Model I. Single loop learning is when you detect and correct an error and don't monkey with Model I. You leave that alone.

**F/K:** It may be an oversimplification, but I've made the comparison that single loop learning is maintenance learning or getting better at what we already know how to do, and double-loop learning is basically asking if we are doing the right thing.

**ARGYRIS:** That's exactly right. But what's happening in the world today is that the executives who have spent millions on all sorts of cultural changes and seen little payoff have begun to conclude that the single-loop learning stuff is inadequate for cultural changes. It may be adequate to teach people how to manipulate a punch press function more effectively or, as you put it, how to do the routine more effectively.

**F/K:** In my opinion, the best title of all the things you've written was "Teaching Smart People How to Learn." Why do smart people find it difficult to learn?

**ARGYRIS:** There are two reasons. I interviewed about 800 people who were MBAs and had gone to work in business, most of them in consulting. They were bright, had very good academic records, and, compared to other human beings, they had few academic failures. They may have had other kinds of failures, but not academic. Therefore, their muscles, if you will, for dealing with failure were not very strong. And since they were bright, they had developed all sorts of fancy footwork to prevent themselves from experiencing failure. Some of that footwork included out-talking other people, outgunning them, and so on.

**F/K:** So they have more sophisticated defensive routines?

**ARGYRIS:** Much more so. These people did not only fear failure, they feared even thinking of fearing failure. So they became very brittle. And if they made an error, it seemed to me they overreacted. So what happens when I try to help them do some double-loop learning? At Harvard, in one instance, students were trying to learn something in any way they could. Finally one student said, "Look I do it this way, I see it's wrong, I do it that way, I see it's wrong, hell, I'm stuck." And I said, "Yes, this is the moment for learning. What I'm asking you to leave is your 'program.' It's almost wired in—this Model I." Most of the students almost panicked, but a few, and it's interesting—as I recollect the women were in the lead on this—were willing to say, "Wait a minute, why can't we learn this other model?" So they gave themselves permission to stumble in the process of learning. Many of them were Baker scholars and great at one kind of learning. But this was not something they had expected to be asked to do in a course on organization and individual learning.

**F/K:** There's a wonderful scene in "Dead Poet's Society" where you can see the class valedictorian taking notes on an essay entitled "How to Appreciate Poetry." After the essay has been completed, Robin Williams tells the class to tear it out of the book because the idea of directions on how to appreciate poetry was terrible. As less successful students get into tearing up part of the text, this "good student" goes to pieces because the new approach is not how he got to be valedictorian.

**ARGYRIS:** And in a world where they're paid highly because they're bright, especially in the consulting world, they rarely face up to their own defensive routines. I remember one young man who made an interesting presentation and the CEO said, "I don't know what you're talking about." The consultant became flustered. In order to increase the level of proof he brought in more slides and more regression analysis

and consequently frustrated the client even more. The senior officer of the consulting firm said to the young man, "I don't hear him [the CEO] telling you that you need more of this kind of information. Why don't we ask him what it is that he's seeking, what kind of knowledge could we give him to prompt him to say, 'Now that's my company.' The senior person was willing to be sensitive to the fears and frustrations of the CEO. I don't think the younger person was willing or capable of doing so at that time. But he learned to become more capable through coaching and experience.

**F/K:** In our interview with Peter Senge, he made reference to something you said 20 years or so ago about organizational learning. Do you remember where that was and what the context was?

**ARGYRIS:** Oh yes, we refer back to that in *Organizational Learning II*. In fact, we have a section on "What is an organization that it might learn?" The gist of the argument is that when organizational learning is being created, it is done by individuals. Organizations can create contexts in which they enable these individuals to do single- or double-loop learning. And organizations have an important responsibility to create these enabling contexts. But it's the individual who has the skill or the competence to be enabled to do something—to create actionability.

**F/K:** This was 20 years before anyone else was using the term "organizational learning." To your knowledge, was this the first reference to this concept?

**ARGYRIS:** Yes. Our first book was published in the mid-70s, and the comments of every publisher we approached were, "We know you and we know Don and respect both of you, but do you think this topic will ever be of interest to the business community?" So, as you can see, they were kind of perplexed. But I think we were a bit lucky in two ways. One, we said yes and turned out to be right. And two, they were willing to take the chance. And so I would say that, to the best of my knowledge, ours is the first book that focused on organizational learning.

**F/K:** You laid the foundation very clearly for some concepts in organizational learning that Arie de Geus and Peter Senge focus on. Peter particularly has extended the audience. You two seem to possess mutual respect and friendship, and he gives you a lot of credit in his own work. What did Peter provide that had been missing before?

**ARGYRIS:** I remember writing a review of his book and beginning with the sentence: "Read this book!" There are two important things that Peter did. He included concepts like systems dynamics and experimental methods of learning that I had omitted. He widened the context, and he connected our work with that extension. He also wrote an extremely well-written book that was well organized and that communicated to the practitioner at just the right time.

With regards to single- and double-loop learning, given the obvious trends of global competitiveness and the impact of information technology, it's likely that boards are going to require companies to be more adaptive and to turn around problems and be more flexible. If it works, single-loop learning becomes a routine and often becomes intractable, so you need double-loop learning to promote adaptability and flexibility. That's another reason why I think the executives are finding this of interest. They deal with skilled incompetence all of the time.

**F/K:** Skilled incompetence. What is that?

**ARGYRIS:** First of all, something is incompetent when the behavior doesn't produce what is intended. There's a mismatch. Model I, if you use it skillfully, will lead to escalating error, self-protectiveness, and self-fulfilling prophecies that are anti-learning.

**F/K:** A "vicious cycle" to use the terminology of systems dynamics.

**ARGYRIS:** Yes, but the people we are describing and the routines they use are highly skilled. Model I tells the person, "If you get in trouble, blame someone else. And keep in mind 'win, don't lose.'" This doesn't encourage the kind of reflection where you become aware of what you are unaware of. So when Model I-type negative consequences are being produced, they are often unaware that they're doing it, and the unawareness is skilled. If you ask yourself the question "What is skillful behavior?" I would answer, (1) it works; (2) it appears effortless; and (3) you take it for granted. Indeed you could lose your skill if you start focusing on it. If you're playing a good game of tennis and someone says, "Bend your wrist just a bit," you may say "Aw, come on, let me alone." If you then start hitting the ball out of the court, it is probably because you have become conscious of how you hold your wrist.

The dilemma is that once you're skillful at Model I (or indeed skillful at anything), you no longer pay attention to what creates the skill because you've now internalized it. You are unaware of the impact, but the unawareness is due to the skills you have. It's not an empty hole in your head. The brain is not at all unaware of how to help you be unaware.

Years ago there was a major accounting firm where I met with 17 members of the top management team. We started Sunday night working through cases. Tuesday the CEO said to his group, "I know we're supposed to meet at 8:30 tomorrow, but can we meet at 8:00? I've looked at my case and other cases we will deal with, and there is a pattern to the problems. These are the problems that I thought we'd solved with this cultural change that we spent \$3 million on and now, two years later, we are doing exactly what we thought we had changed." The partner in charge of human resources said, "Yes, but you attended the program, and rated it very highly." And the CEO replied: "That's my big dilemma. I honestly felt I had learned something. So I'm asking us to consider what we did learn"

**F/K:** And that kind of "honest inquiry" laid the foundation you needed to help make that program successful.

**ARGYRIS:** Yes. First, you've got to get a program that gets at the theories people actually use. That means we have to focus on their actual behavior because with skilled incompetence and skilled unawareness, people may not give us the data we should get, not because they're hiding it—they're just unaware. Often we find that people are skillfully unaware of their own negative impact and skillfully aware of everybody else's negative impact and skillfully incompetent to help do anything about it. The best source of the data we need are actual physical transcripts of meetings where they're trying to solve a problem. We either take copious notes or tape the meetings.

**F/K:** May I ask you about the use of personal cases? Isn't this essentially the use of the "two column exercise" where people describe a dialogue where they had (or might have) attempted to deal with a problem in their organization? They write two or

three double-spaced pages about their conversations, thoughts or feelings about overcoming barriers; each page is divided into two columns. In the right-hand column, they describe what actually was (or might have been) said. In the left-hand column, they describe any thoughts or feelings that they experience while having this kind of conversation. Do you agree that the left-hand column helps reveal "the theory in practice?"

**ARGYRIS:** Exactly. We use personal cases quite often. First, it's economical from their point of view and ours. Second, with all the observations we make with a group, we still don't know much about what's on the left hand side of the problem—the thoughts and feelings that they are censoring. And if they are skillful at censoring, we wouldn't be able to detect it. Therefore these cases become critical. With the cases and with the tape recordings, we can make an analysis of what's going on. We develop a prognosis of the defensive routines, and then give them the left hand/right hand contrasts, and develop a diagnosis of how they create these defensive routines. I remember Mark Fuller [CEO of Monitor] saying, "This is fascinating, but Monday morning I'm not going to be able to change my Model I patterns." I said, "No, what you need is practice." "So are we gonna get some booster shots?" he responded. "No, I'm going to be available to work with the directors individually or in small groups, when you're trying to deal with discipline problems. Call me, I'm available, we'll record it, analyze it and so on." In *Knowledge for Action*, there are a lot of transcripts that show that is exactly what we do.

So the theory is really simple. First, help them become aware of their Model I. Next, help them become aware of skilled unawareness and skilled incompetence. Third, mix that with the organizational consequences like the organizational defensive routines. Fourth, let them connect those kinds of knowledge with the business decisions they're making. Fifth—practice, but practice must focus on problems they consider to be important. Finally, our notion was we don't go to the next layer of an organization until we can see evidence through tape recordings that the top people are beginning to behave consistently with Model II. By the way, this doesn't mean we throw out Model I—Model I is very good for incremental improvements or single-loop learning.

Eventually the top level got pretty good, but the people at the next level were frustrated and wanted to know what we were talking about with terms like "skilled unawareness," etc. So, on a voluntary basis, the top executives explained the concepts to the next level of management. Interestingly, that turned out not to be a good idea. It's not that they didn't learn, it's simply that they did not possess the skills to teach other people the model. What we did was to prepare a two-day seminar for groups of lower-level people who wanted to learn.

**F/K:** You have made numerous contributions to many different disciplines, but how did you come to be a co-author of accounting articles? This would appear to be a long way from social psychology.

**ARGYRIS:** As you know, Activity-Based Costing (ABC) is a technical theory that emerged in the mid-1980s to provide more accurate information to managers about the cost and productivity of business processes, products, services, and customers. Bob Kaplan, who was one of the principal originators of this concept, intended to provide assistance to managers in making better decisions about the use and deployment of their resources. Frequently, after an activity-based cost study revealed new insights about

the relative cost and profitability of certain activities, operating managers were reluctant to act on this information. (R. Cooper 1985, Schrader Bellows, HBS case #9-186-051). In the Schrader/Bellows case, they made a cost analysis using ABC, and to make a long story short, everyone thought it was great, but almost no one did anything about it. That's why Bob Kaplan decided to contact me to see if maybe the lack of action might be due to defensive routines.

**F/K:** Is it fair to say that Bob Kaplan developed the concepts of Activity-Based Costing and then worked with you on implementation issues?

**ARGYRIS:** Yes. ABC is a great concept but the principles weren't being implemented. I had two interests in this. One was to develop a way in which organizational behavior could help functional leaders become more effective in Activity-Based Costing and other technical issues. The other objective was to see if I could help them implement this stuff—help change the underlying technical theories that people had.

**F/K:** In "Today's Problems with Tomorrow's Organizations," you cited the requirements for the organization of the future. We'd like to summarize those. Has your thinking changed in regard to these recommendations since it was written?

**ARGYRIS:** My ideas have not changed but they may have been somewhat abstract. We've learned how to make the challenges more actionable. In order to implement, you need a much better integration of the technical and behavioral. And I believe you can see examples of how we've done that in *Organization Learning II*.

**F/K:** You made the point that the real test of an organization was its ability to produce valid knowledge. I assume there is a step beyond that, which says that valid knowledge results in productive, profitable action.

**ARGYRIS:** Yes, you produce valid knowledge in the service of choice—action that makes choice. Non-action prevents choice.

This relates to what is being called "Knowledge Management" today. The goal which is usually recommended is to simply pull knowledge together and make it available. Unfortunately, I found places where that's been done, but what is assembled is not used with any great enthusiasm by the people who should be using it. A different way of looking at knowledge management is to ask: "How do we manage knowledge while we are interacting with each other?"

If you asked me the ultimate requirement for leadership, I would say it is the everyday, face-to-face relationships to create ways that knowledge is managed so that it is valid and actionable.

**F/K:** Since retirement from Harvard, you haven't slowed down. Do you still find surprises when you're analyzing data, talking to executives or conducting research? What's a recent surprise?

**ARGYRIS:** Yes. In fact, that's why I'm so involved and have lots of energy. If I weren't learning, I'd lose a lot of the energy. A current surprise: I'm working with a top management group of a multibillion-dollar organization, and the CEO is a person who understands Model II and also rigorous reasoning. He moved into this firm a couple of years ago and was helping vps learn these things. We've been observing that

## ***Requirements of Tomorrow's Organizations***

Modern organizations need (1) much more creative planning, (2) valid and useful knowledge about new products and new processes, (3) increased concerted and cooperative action with internalized long-range commitment, and (4) increased understanding to meet the challenges of complexity.

These requirements in turn depend upon (1) continuous and open success between individuals and groups, (2) free, reliable communication, where (3) interdependence is the foundation of cohesiveness, (4) trust, risk-taking, and helping each other is prevalent, so that (5) conflict is identified and managed.

These conditions, in turn, require individuals who (1) do not fear stating their complete views, (2) value and seek to integrate their contributions into a creative total (3) rather than needing to be individually rewarded, thus (4) finding the search for valid knowledge and the development of the best possible solutions.

group as it has developed, and I would say the majority of people believe that CEO is tough-minded but is convertible and impressionable.

**F/K:** Is there any assumption that a Model II manager would not be tough-minded?

**ARGYRIS:** The traditional assumption in whatever was the equivalent of Model I was that the boss would be tough but stay away from pressing people's reasoning and confronting them on issues that might be embarrassing. As I read the recent books on leadership, they talk about being tough. Model II says be tough, you don't back down—you do it constructively. Most of the executives will espouse that, but they often opt for Model I because it has social virtues.

**F/K:** Have you learned about any of your own defenses through doing this work?

**ARGYRIS:** Yes, I believe I have learned to make sure that in the interest of being an effective and successful human being, I didn't push people beyond the pace at which they were capable of learning. In fact, my life's work was partially determined by a personal experience with my defensive routines. Toward the end of World War II, I was a young lieutenant with fairly significant responsibilities for an operation in Chicago. As the war effort wound down, I was making plans for my discharge and turning the operation over to a civilian employee. On my last day in the office, I noticed one of the informal leaders in the office, a large, rotund woman, coming towards my office with most of the staff trailing behind her. She proceeded to present me with two nice gifts to tell me how much they had enjoyed working with me and to wish me well in my civilian endeavors. After the brief ceremony ended, she gave me a big hug and kissed me on the cheek. It was a very pleasant, flattering experience.

After I had returned home to New Jersey, I found the people there didn't seem to appreciate me as much as they had back in Chicago. I had a couple of job offers in the Chicago area because the results we had achieved had attracted some attention in the civilian sector. So I returned to Chicago and visited with my successor. During our conversation I asked him, "What was it really like to work for me?" He responded, "Do you really want to know?" Of course what I really wanted was to hear about what a wonderful job I had done, but I do have a commitment to truthfulness, so I asked him to proceed. He began to talk about how demanding and auto-

cratic I had been, and how difficult it was to work for me.

As I was shrinking from this unexpected information, I saw the office leader, so I waved her into the office and explained what had been taking place. I turned to her and said, "What do you think about what he's saying?" With just a moment's hesitation, she responded, "Well, that's pretty much how you were." "But," I responded, "you hugged and kissed me and said that you had enjoyed working for me."

She said "Well, the war was over and we were happy that things had turned out well. But the truth is, we were really glad to see you move back into the civilian world."

That experience was somewhat painful to me, but it was a tremendous opportunity to learn. I suppose that had something to do with my decision to spend my professional career trying to find out what it is that causes people to believe that they can't be truthful in organizational settings.

## REFERENCES:

For coverage of many of the points reviewed in this interview, see Chris Argyris, *On Organizational Learning*, Cambridge, MA, Blackwell Publishers, Inc., 1994, and *On Organizational Learning II*, with Donald Schon, Addison Wesley, 1996.

Another recent reference helpful in phrasing our questions was Chris Argyris, "Tacit Knowledge and Management," a working paper, dated November 4, 1996.



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